

REMARKS

Applicant respectfully requests reconsideration of this application in view of the foregoing amendment and following remarks.

Status of the Claims

Claims 1-36 are pending in this application. Claims 1, 8, 18, 31 and 32 are independent. Claims have been rejected either under 35 U.S.C. §102, §103 or §112. Claims have been objected to because of informalities.

Objections in Claims and Drawings

In paragraph one (1) of the office action, claims 6, 8, 18, 19, 25, 27, 28 and 30 have been objected to because of informalities. The office action indicates that some limitations of the claims do not have appropriate antecedent basis.

Claims 6, 8, 18, 19, 25, 27, 28 and 30 have been amended as shown above to address the objections as suggested by the office action.

In paragraph two (2) of the office action, the drawings have been objected to. The office action indicates that the drawing must show every feature of the invention in the claims. In particular, the office action indicates that the light amount adjusting means need to be included in the illuminating means (claim 16) and a screen need to be shown (claim 31).

Applicant submits herewith a Submission of Proposed and Formal Drawing for Fig. 1 with a proposed correction to Fig. 1 in which the screen S and another movable stop means 20c are shown and to be connected to the STOP DRIVING MEANS 20b. Applicant also submits a formal drawing of Fig. 1 should the proposed amendment to this drawing prove acceptable. No

new matter has been added by this proposed amendment. The relevant portions of the specification have also been amended as shown above to incorporate the changes in Fig. 1.

Applicant respectfully requests that these objections be withdrawn.

Rejection under 35 U.S.C. §112

In paragraph four (4) of the office action, claim 21 has been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The office action indicates that "how or why the projection optical system is a schlieren optics."

Applicant notes that the language of claim 21 simply equates the projection optical system to the so-called schlieren optics, i.e., said projection optical system is a so-called schlieren optics. Applicant also notes that the original specification describes that "[t]he projection optical system PL1 in the present apparatus may preferably be comprised of a so-called schlieren optics (inverse schlieren)" at page 9, lines 12-14.

Based on the above disclosure, claim 21 has been amended to recite "said projection optical system is comprised of a so-called schlieren optics."

Applicant believes that claim 21 as amended is definite particularly pointing out and distinctly claiming the subject matter.

Reconsideration and withdrawal of the rejection of claim 21 under 35 U.S.C. §112, second paragraph, is respectfully requested.

Rejection under 35 U.S.C. §102

In paragraph six (6) of the office action, claims 1, 3, 5, 6, 8, 9, 11, 13, 14, 18-20, 22, 24, 26, 27, 29-32, 34 and 36 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,597,223 to Watanabe et al. ("Watanabe").

Watanabe discloses a projection type display device having a light source, a modulating device and its driving unit. In particular, Watanabe discloses a first and second aperture stop units in the optical path of the display device to control the angle distribution of a light beam incident on the modulating device. It is indicated in Watanabe that the control of the first and second aperture stop units is based on the contrast and luminance of the displayed image on a screen. A portion of Watanabe describes:

In a display apparatus according to the first aspect of the present invention, in an aperture adjustment mode a control means causes a modulating device to produce modulated light under predetermined conditions. With this modulated light projected onto a screen, the control means detects the luminance on the screen. In accordance with this detected luminance, the control means adjusts the angle of collection, i.e., the aperture size of at least one of first and second aperture stop means such that the contrast and the luminance of the displayed image are set to their respective optimum values. This control of the aperture size is based on the finding obtained by the present inventors that the luminance and the contrast of a displayed image largely depend upon the angle distribution of a light beam incident on the modulating device. (Column 7, lines 28-42 of Watanabe)

Independent claims 1, 8, 31 and 32 have been amended for further clarification to add a limitation that already appears in independent claim 18. In other words, each of independent claims 1 8, 31 and 32, as amended, recites that the "attenuating is based on an input image signal to the display device." Support for the added limitation may be found, for example, page 8, line 40 through page 41, line 11 of the original specification. In contrast, as Applicant understands it, Watanabe's aperture stop is controlled based on the detected luminance data on the screen, i.e., not based on the input image signal.

Accordingly, each of independent claims 1, 8, 18, 31 and 32 is neither anticipated by nor rendered obvious in view of Watanabe for at least the reasons discussed above.

In paragraph seven (7) of the office action, claims 1-3, 5-11, 13-15, 17-34 and 36 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2002/0044261 to Ouchi et al. ("Ouchi").

Applicant notes that the present application claims a foreign priority under 35 U.S.C. §119 based on a Japanese Application No. 2001-005307 ("the JP307") filed on January 12, 2001 which antedates Ouchi's filing date of September 21, 2001. Accordingly, Applicant submits herewith an English language translation of the JP307 to perfect a claim to priority under 35 U.S.C. §119. Applicant notes that a certified priority document of the JP307 was submitted April 3, 2002. Accordingly, Applicant requests that the rejections of claims 1-3, 5-11, 13-15, 17-34 and 36 under 35 U.S.C. §102(e) over Ouchi be removed.

Reconsideration and withdrawal of the rejections of independent claims 1, 8, 18, 31 and 32 under 35 U.S.C. §102 is respectfully requested.

Rejection under 35 U.S.C. §103

In paragraph nine (9) of the office action, claims 2, 10, 25 and 33 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Watanabe in view of U.S. Patent No. 3,121,798 to Ploke ("Ploke").

Ploke discloses a variable diaphragm structure for varying the amount of light reaching a receiver of a photoelectric exposure meter. As Applicant understands it, however, Ploke fails to show or suggest that a light control function is performed based on an input image signal to a display device as recited in claims 1, 8, 18 and 32 as amended from which claims 2, 10, 25 and 33 depend, respectively.

Accordingly, Applicant believes that each of claims 2, 10, 25 and 33 is neither anticipated

by nor rendered obvious in view of Watanabe and Ploke, taken either alone or in combination, for at least the reasons discussed above.

In paragraph ten (10) of the office action, claims 4, 12 and 35 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Watanabe as applied to claims 1, 9 and 32 above, and further in view of U.S. Patent No. 6,017,123 to Bleha et al. ("Bleha").

Bleha is cited as disclosing an ND filter means in claims 4, 12 and 35. Bleha discloses a projection system having first and second light valve projectors which project a composite image onto a screen by overlapping the first and second images in an overlap region. As Applicant understands it, however, Bleha fails to show or suggest that a light control function is performed based on an input image signal to a display device as recited in claims 1, 8 and 32 as amended from which claims 4, 12 and 35 depend, respectively.

Accordingly, Applicant believes that each of claims 4, 12 and 35 is neither anticipated by nor rendered obvious in view of Watanabe and Bleha, taken either alone or in combination, for at least the reasons discussed above.

In paragraph eleven (11) of the office action, claims 4, 12 and 35 have been further rejected under 35 U.S.C. §103(a) as being unpatentable over Ouchi as applied to claims 1, 9 and 32 above, and in further view of Bleha.

As discussed above, since the present application antedates Ouchi and rejection over Ouchi becomes a moot by filing the English translation of the JP307. Furthermore, Bleha, as discussed above, fails to show or suggest at least the features of claims 4, 12 and 35 (i.e., a light control function is performed based on an input image signal to a display device).

Accordingly, each of claims 4, 12 and 35 is neither anticipated by nor rendered obvious in

view of Ouchi and Bleha, either taken alone or in combination for at least the reasons discussed above.

In paragraph twelve (12) of the office action, claim 16 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Ouchi.

As discussed above, by filing the JP307, Ouchi will be removed from prior art reference and the rejection would become a moot.

Additionally, claim 15 from which claim 16 depends has been amended for further clarification. In particular, claim 15, as amended, recites "said light amount adjusting means is disposed between said first and second optical system."

Reconsideration and withdrawal of the rejections of the claims under 35 U.S.C. §103 is respectfully requested.

Double Patenting

In paragraph fourteen (14) of the office action, claims 18 and 21-29 have been provisionally rejected under judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5, 7 and 11-14, respectively, of co-pending Application No. 09/957,240 to Ouchi.

Independent claim 18 recites among other things that "wherein said control signal generating means generates a control signal on the basis of the luminance level of an input image signal so as to make the amount of projection light great and the modulation of the write signal small when said luminance level is high, and to make the amount of projection light small and the modulation of the write signal great when said luminance level is low."

Applicant notes that the above-element of claim 18 of the present application is not cited in claims 1-5, 7 and 11-14 of the co-pending Application No. 09/957,240 to Ouchi. Accordingly, Applicant believes that each of claims 18 and its depending claims (i.e., claims 21-29) is neither anticipated by nor rendered obvious in view of claims 1-5, 7 and 11-14 of the co-pending Application No. 09/957,240 to Ouchi for at least the reasons discussed above.

Reconsideration and withdrawal of the rejections of claims 18 and 21-29 under the judicially created doctrine of obviousness-type double patenting is respectfully requested.

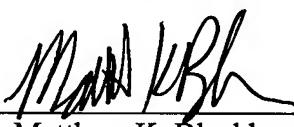
Applicant has not individually addressed the rejections of the dependent claims because Applicant submits that the foregoing places the independent claims from which they respectively depend in condition for allowance. Applicant however reserves the right to address such rejections of the dependent claims should such be necessary.

AUTHORIZATION

A petition for a two-month extension of time along with the associated fee is enclosed, extending the date for responding until July 21, 2003. Should an additional extension of time be required to render this paper timely filed, such extension is hereby petitioned and the Commissioner is authorized to charge any other fees necessitated by this Amendment, or credit any overpayment to our Deposit Account No. 13-4500 (Order No. 1232-4808). **A DUPLICATE COPY OF THIS SHEET IS ENCLOSED.**

An early and favorable examination on the merits is respectfully requested.

Respectfully submitted,
MORGAN & FINNEGAN LLP

By: 
Matthew K. Blackburn
Registration No. 47,428

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CORRESPONDENCE ADDRESS:
MORGAN & FINNEGAN L.L.P.
345 Park Avenue
New York, New York 10154
(212) 758-4800